

Application Serial No. 10/521,539

Attorney Docket No. OT-5055

LISTING OF THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

1. (Previously Presented): A buffer for an elevator system, the buffer comprising:
a conical coil spring,

wherein the buffer is configured to be disposed at one end of a hoistway of the elevator system for contacting a vertically moving member of said elevator system in the event of an abnormal overrun,

wherein the conical coil spring includes a spiral coil element that comprises a series of coils,

wherein a radius of the spiral coil element decreases along an axis of the conical coil spring such that if the spiral coil spring is fully compressed, the coils of the spiral coil spring are configured to be arranged in a substantially planar configuration, and

wherein a thickness of the coil element is substantially uniform between an outermost coil and an innermost coil.

2. (Previously Presented): The buffer as recited in claim 1, wherein an outer radius of a coil is less than an inner radius of an adjacent coil, thereby permitting said coils to be compressed axially without experiencing radial interference.

3. (Previously Presented): The buffer as recited in claim 2, wherein a cross-section of the coil element is circular.

4. (Previously Presented): The buffer as recited in claim 2, wherein a cross-section of the coil element is arcuate.

5. (Previously Presented): The buffer as recited in claim 2, wherein a transverse coil pitch of the coil element is constant.

6. (Previously Presented): The buffer as recited in claim 1, wherein the vertically moving element is an elevator car.

Application Serial No. 10/521,539

Attorney Docket No. OT-5055

7. (Previously Presented): The buffer as recited in claim 1, wherein the vertically moving element is a counterweight.

8. (Previously Presented): The buffer as recited in claim 1, wherein a thickness the innermost coil radially varies so as to create a substantially flat contact surface.

9. (Previously Presented): The buffer as recited in claim 1, wherein a thickness the outermost coil radially varies so as to create a substantially flat contact surface.

10. (Previously Presented): The buffer as recited in claim 9, wherein a thickness the innermost coil radially varies so as to create a substantially flat contact surface.